AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A semiconductor device comprising a substrate of a first semiconductor material and a compound layer of said first semiconductor material and a second semiconductor material disposed on the substrate, the ratio of the first material to the second material of the compound layer being decreased away from the substrate towards the upper surface of the compound layer, wherein the rate of decrease of the ratio is linear and different on opposite sides of an intermediate point, and wherein the ratio is decreasing on opposite sides of the intermediate point, and wherein the ratio of the first material to the second material of the compound layer decreases from the intermediate point to the upper surface of the compound layer.

2. (Original) A semiconductor device as claimed in claim 1, in which the rate of decrease of the ratio increases away from the substrate towards the surface of the compound layer.

3.-6. (Cancelled)

7. (Previously Presented) A semiconductor device as claimed in claim 1, in which a final layer comprising said first material is deposited on the surface of the compound layer.

8. (Previously Presented) A semiconductor device as claimed in claim 1, in which the first material is silicon.

9. (Previously Presented) A semiconductor device as claimed in claim 1, in which the second material is germanium.

10. (Previously Presented) A semiconductor device as claimed in claim 1, in which a composition of the compound layer at the upper surface thereof comprises 10-50% of said second material.

11. (Original) A semiconductor device as claimed in claim 10, in which the composition of the compound layer at the upper surface thereof comprises substantially 20% of said second material.

12. (Cancelled)

13. (Currently Amended) A method of manufacturing a semiconductor device, the method comprising providing a substrate of a first semiconductor material, depositing a compound layer of said first semiconductor material and a second semiconductor material on the substrate such that the ratio of the first material to the second material of the compound layer decreases away from the substrate towards the upper surface of the compound layer, the rate of decrease of the ratio being linear and different on opposite sides of an intermediate point, and wherein the ratio is decreasing on opposite sides of the intermediate point, and wherein the ratio of the first material to the second material of the compound layer decreases from the intermediate point to the upper surface of the compound layer.

14. (Original) A method as claimed in claim 13, in which the rate of decrease of the ratio is increased away from the substrate towards the surface of the compound layer.

15.-16. (Cancelled)

17. (Previously Presented) A method as claimed in claim 13, in which the ratio of the first material to the second material of the compound layer is decreased in part by decreasing a temperature at which the layer is deposited from the substrate towards the surface of the compound layer.

18.-22. (Cancelled)